DOCUMENT-IDENTIFIER: US 6134308 A
TITLE: Caller ID logging: entry storage on a per line basis

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ABPL:
A telephone system with a caller ID logging feature includes a plurality of
telephone stations which share a plurality of telephone lines connected to the
telephone system. Each one of the plural telephone lines is associated with
one or more of the telephone stations. A control processor (CPU) monitors the
incoming calls on the telephone lines connected to the telephone system, and
also receives caller ID information from the Central Office of the telephone
service provider. For unanswered incoming calls and answered calls which are
to be stored, the CPU stores the associated caller ID information in a memory
as a caller ID record including data indicating the telephone lines on which
the incoming call was received. The stored caller ID records for each
telephone line are accessible from telephone stations that are associated with
that telephone line. Therefore, only one record is required which all users
may access, thereby increasing the efficiency of the memory over prior art
systems. The memory includes a minimum capacity per line so that a minimum
number of records are allocated for each telephone line.

BSPR:
The present invention comprises a telephone system with an incoming caller line
ID (ICLID) record logging feature that uses a dynamic memory to store ICLID
records. The ICLID record logging feature stores information for unanswered
calls if and only if the call alerts a telephone line associated with the ICLID
record logging feature, the call ceases alerting, and the call remains
unanswered. Optionally, the ICLID record logging feature may also log ICLID
records for answered calls. The following caller ID information is typically
provided by the CO for each call:

DRPR:
FIG. 2A is a flow chart showing the optional steps for storing an answered
caller ID record;
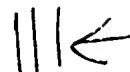
CLPR:
5. The method of claim 1, further comprising the steps of determining if
answered calls are to be stored, and storing the caller ID information for an
incoming call when the incoming call is answered if it is determined that
answered calls are to be stored.

CLPR:

17. The telephone system of claim 12, wherein said processor is operatively connected to said plural telephone lines for storing in the memory incoming caller ID information for an answered incoming call when a user of the telephone system activates a save as answered function.

CLPV:

wherein said processor is operatively connected for storing and displaying, with each caller ID information record, data comprising a viewed/unviewed status, a call answered/not answered status, a two-digit telephone line number on which an incoming telephone call was received, and an auto dialback status.

FIG. 3 is a flow diagram illustrating affinity data generation based upon incoming calls. Beginning with reception of an incoming call, start step 300, the method collects and stores caller ID information, step 305, preferably the name and corresponding telephone number of the calling party . When the user has answered or accepted the incoming call, step 310, and when the duration or length of that call is greater than a minimum or other predetermined period of time, step 315, then the caller ID information for that incoming call is added to the affinity database, step 320, which is also illustrated in greater detail with respect to FIG. 5. In the preferred embodiment, the user may specify or program what predetermined period of time he or she would like as a minimum incoming call duration for adding an incoming call name and number to the affinity database, based on his or her individual conversation patterns. For example, a particular user may feel that only incoming calls lasting more than five minutes should be included in the affinity database, while another less talkative user may want all calls lasting more than three minutes. Default values may also be provided for the predetermined period of time, such as three minutes. In addition, varying values may also be provided, with correspondingly higher priorities assigned to longer calls. When either the user either does not answer the incoming call (in step 310), or when the duration of the incoming call is less than the predetermined period of time (in step 315), the method does not add that caller ID information to the affinity database, and the incoming call affinity database generation routine of the preferred method embodiment may end, return step 325. As mentioned above, as an affinity measurement, the method presumes that an unanswered call or a call of such a short duration is due to the unwanted nature of the incoming call, and as a consequence, that incoming caller ID information is not added to the affinity database.